



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**  
**999 18<sup>TH</sup> STREET - SUITE 300**  
**DENVER, CO 80202-2466**  
**Phone 800-227-8917**  
**<http://www.epa.gov/region08>**

**September 28, 2004**

Ref: 8ENF-UFO

**CERTIFIED MAIL 7003-2260-0001-7778-9210**  
**RETURN RECEIPT REQUESTED**

C T Corporation System, Registered Agent for  
Tom Brown, Inc.  
1720 Carey Avenue  
Cheyenne, Wyoming 82001

Re: UNDERGROUND INJECTION  
CONTROL (UIC)  
Proposed Administrative Order and  
Opportunity to Request a Hearing  
(Complaint)

Dear Registered Agent for Tom Brown, Inc.:

The enclosed document is a Proposed Administrative Order and Opportunity to Request a Hearing (Complaint) ("Order") for violations of the Safe Drinking Water Act ("SDWA"). Please have Tom Brown, Inc. ("Tom Brown") carefully read the Order soon, since it describes Tom Brown's rights and responsibilities in this matter as well as EPA's authority, the factual basis of the violations, and the background for the proposed penalties. Also enclosed is a copy of the Rules of Practice that govern these proceedings, the required Public Notice associated with this Order and, in case Tom Brown meets the criteria, an information sheet about the Small Business Regulatory Fairness Act.

**Tom Brown is required to take action within 30 calendar days of your receipt of this Order** to avoid the possibility of having a default judgment entered against Tom Brown that could impose the penalty amount in the Order.

Whether or not Tom Brown requests a hearing, we encourage an informal conference with EPA concerning the alleged violations in an effort to negotiate a settlement. Tom Brown may wish to appear at an informal conference and/or be represented by legal counsel. To arrange for such a conference, Tom Brown should contact Jim Eppers, Enforcement Attorney, Legal Enforcement Program, at the number provided below. Request for such a conference does not extend the 30 calendar day period during which a request for hearing must be submitted.



*Printed on Recycled Paper*

Public Notice of EPA's Order and the opportunity to provide written comments on the Order is being provided pursuant to section 1423 (c)(3)(B) of the SDWA, 42 U.S.C. § 300h-2(c)(3)(B). Should a hearing be held, any person who comments on the Order has a right to participate in the hearing.

If Tom Brown has technical questions relating to this matter, the person most knowledgeable on my staff is Nathan Wiser, UIC Enforcement Team, Technical Enforcement Program, at (303) 312-6211. For all legal questions, the person most knowledgeable on my staff is Jim Eppers at (303) 312-6893. Mr. Wiser and Mr. Eppers can also be reached at the following addresses:

Nathan Wiser (Mail Code 8ENF-UFO)  
U.S. EPA Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202-2466, or

Jim Eppers (Mail Code 8ENF-L)  
Enforcement Attorney  
U.S. EPA Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202-2466

We urge Tom Brown's prompt attention to this matter.

Sincerely,

**Michael T. Risner for/**  
Carol Rushin  
Assistant Regional Administrator  
Office of Enforcement, Compliance  
and Environmental Justice

Enclosures:

Proposed Administrative Order  
and Opportunity to Request Hearing  
40 C.F.R. Part 22  
Public Notice  
U.S. EPA Small Business Resources Fact Sheet

cc: Vernon Hill, Chairman (with all enclosures)  
Eastern Shoshone Business Council

Burton Hutchinson, Sr., (with all enclosures)  
Northern Arapaho Business Council

Don Aragon, Director (with all enclosures)  
Wind River Environmental Quality Commission

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## PROPOSED ADMINISTRATIVE ORDER AND OPPORTUNITY TO REQUEST A HEARING (COMPLAINT)

1. This is a civil administrative action issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (“EPA”) by section 1423(c) of the Safe Drinking Water Act (“Act”), 42 U.S.C. § 300h-2(c). The Administrator has properly delegated this authority to the undersigned EPA official. This proceeding is governed by the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits (“Consolidated Rules”) set forth at 40 C.F.R. part 22, a copy of which is enclosed.

2. All general allegations apply to and are incorporated in each of the findings set forth in this Proposed Administrative Order and Opportunity to Request a Hearing (Complaint) ("Order"). Attachment A, which further describes the violations alleged in this Order, is incorporated herein.

3. Tom Brown, Inc., at all times pertinent hereto, is a corporation organized under the laws of the State of Delaware authorized to do business in the State of Wyoming.
4. Section 1421 of the Act, 42 U.S.C. § 300h, authorizes EPA to promulgate regulations for underground injection control ("UIC") programs setting forth minimum requirements to prevent underground injection which endangers regulated drinking water sources. EPA has promulgated such regulations at 40 C.F.R. parts 124, 144, 146, 147, and 148.
5. Pursuant to section 1422(e) of the Act, 42 U.S.C. § 300h-1(e), and 40 C.F.R. § 147.2553, EPA administers the UIC Program for all Class II wells on the Wind River Reservation Indian Lands in the State of Wyoming as of November 25, 1988.
6. Pursuant to section 1423(c)(2) of the Act, 42 U.S.C. § 300h-2(c)(2), the Administrator may issue to any person subject to and in violation of any requirement of any applicable UIC program a civil penalty of not more than \$5,500 for each day of violation for any violation occurring prior to March 15, 2004 and not more than \$6,500 for each day of violation for any violation occurring on or after March 15, 2004, up to a maximum administrative penalty of \$157,500, or requiring compliance with such regulation, or both.
7. Tom Brown, Inc. ("Respondent") is a "person" within the meaning of SDWA § 1401(12), 42 U.S.C. § 300f(12).
8. Class II injection wells defined at 40 C.F.R. § 144.3 and classified at 40 C.F.R. § 144.6(b) and 146.5(b) are wells used to emplace fluids underground (1) which have been brought

to the surface in connection with oil and gas production (known as salt water disposal), or  
 (2) for the purpose of enhancing oil recovery (known as enhanced recovery).

9. The applicable regulations for Class II wells are set forth at 40 C.F.R. parts 144 through 147.
10. Respondent operates the following Class II well (Subject Well), located on the Wind River Indian Reservation within the State of Wyoming, that is subject to this Order:

**Tribal PN #16-34**, EPA Permit No. WY20831-04394, Effective April 1, 1998  
 Salt Water Disposal Well  
 T4N, R2E, Section 16, SW/4 of the SE/4  
 Fremont County, Wyoming.

## **FINDINGS**

### ***A. Injection Pressure***

11. The UIC regulations at Title 40 of the Code of Federal Regulations §146.23(a)(1) and the UIC Permit No. WY20831-04394 (“UIC Permit”) limit injection pressure to a value calculated to ensure that the pressure induced by injection will not cause fluid migration into an underground source of drinking water (“USDW”). In this case, the UIC Permit, issued April 1, 1998, limited the pressure to 1819 pounds per square inch (psi) in order to prevent propagation of existing or initiation of new fractures in the geologic injection zone, which could otherwise create pathways for fluid migration out of the designated injection zone into overlying USDWs. In order to verify that the maximum allowable injection pressure limit was appropriate for this well, Respondent conducted a step rate test and submitted the test results to EPA. When the step rate test data was reviewed,

EPA used the data results to modify the maximum UIC Permit's allowable injection pressure limit at part II(C)(4), lowering it to 1415 psi. This modification took place on February 26, 2002.

12. The UIC regulations at 40 C.F.R. §146.23(b) and the UIC Permit at part II(D)(1), requires the Respondent to, at minimum, weekly observe and monthly record values of injection pressure, annulus pressure, flow rate and cumulative injection volume.
13. The UIC regulations at 40 C.F.R. § 146.23(c) and the UIC Permit at part II(D)(4) require the Respondent to, at a minimum, annually report to EPA the recorded values of injection pressure, annulus pressure, flow rate and cumulative injection volume (the "annual monitoring report").
14. On January 30, 2003, EPA received Respondent's 2002 annual monitoring report. On February 12, 2004, EPA received Respondent's 2003 annual monitoring report.
15. The annual monitoring reports include a monthly value for the maximum observed injection pressure. Respondent reported values which are in excess of the 1415 psi injection pressure limit found in the UIC Permit at part II(C)(4).
16. During the times displayed in Attachment A, Respondent failed to comply with injection pressure limit found at part II(C)(4) of the UIC Permit and therefore violated the Act.

***B. List of Annual Fluid Sources***

17. The UIC Permit at parts II(C)(6) and II(D)(4) requires the Respondent to annually submit a list of the sources of all injected fluids from the previous year.
18. Respondent began injection in August 2001. Pursuant to the UIC Permit at parts II(C)(6) and II(D)(4), a list of sources of all injected fluid was due on or before February 15, 2002.
19. Respondent has never submitted a list of sources of all injected fluid.
20. Failure to report a list of all sources of the injected fluids by February 15, 2002, is a violation of EPA's UIC Permit.
21. During the times displayed in Attachment A, Respondent failed to comply with annual listing of sources of injected fluid required in the permit for the Subject Class II injection well and therefore violated the Act.

***C. Reporting Injection Fluid Analysis***

22. The UIC regulations at 40 C.F.R. § 146.23(b) require operators of all Class II wells to monitor the nature of the injected fluids at time intervals sufficiently frequent to yield data representative of their characteristics.
23. The UIC Permit at part II(D)(1)(a) and (4) requires the Respondent to analyze a sample of the injected fluid and report the results of the analysis within the first year of operation, containing, at a minimum, its pH, specific gravity, specific conductance, and total dissolved solids. This report must be submitted by February 15<sup>th</sup> of the year following the reporting year.
24. Respondent began injection in August 2001. Pursuant to the UIC Permit at part II(D)(4), a fluid analysis of injected fluid was due on or before February 15, 2002.

25. Respondent first reported an analysis of its injected fluid on June 5, 2003.
26. Failure to report an analysis of the injected fluids by February 15, 2002, is a violation of the regulations at 40 C.F.R. §§ 146.23(b) and (c) and EPA's UIC Permit.
27. During the times displayed in Attachment A, Respondent failed to comply with fluid analysis reporting requirements required in the permit for the Subject Class II injection well and therefore violated the Act.

***D. Faulty Equipment***

28. The UIC regulations at 40 C.F.R. § 144.51(e) and the UIC Permit at part III(E)(5), require the Respondent to maintain all equipment at the well in good condition in order to verify compliance with the applicable UIC Permit conditions measured at the wellhead.
29. On November 20, 2003, EPA inspectors found the Respondent's tubing pressure gauge reading 1480 psi, when the actual pressure was 1350 psi (measured using EPA's calibrated gauge and the pump house gauge). This discrepancy indicates the Respondent's tubing pressure gauge failed to maintain sufficient accuracy to be relied upon for monitoring the injection pressure.
30. In a December 5, 2003, letter from Tom Brown, Inc. to EPA, Respondent reported that the pressure gauge that had been in use at the well was out of calibration.
31. During the times displayed in Attachment A, Respondent failed to comply with the requirement to maintain wellhead equipment in good working order and therefore violated the Act.

***E. Failure to Conduct Temperature Log***



32. At the time the permit was issued, the Subject Well was a plugged dry hole. There was no longstring casing in the dry hole.
33. When the well was re-drilled and completed, 5-1/2 inch longstring casing was set to a depth of 6995 feet below surface, cemented, and, on March 2, 2001, Respondent conducted a cement bond log from 3000 feet to 6944 feet below surface, in order to attempt to demonstrate adequate mechanical integrity as it is defined at 40 C.F.R. §146.8(a)(2), also referred to as “external mechanical integrity.” “External mechanical integrity” means there is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the wellbore.
34. For Class II wells, as specified at 40 C.F.R. §146.8(c)(2), the absence of such significant fluid movement can be demonstrated using adequate cementing records. The cement bond log conducted when the longstring casing was cemented was conducted to demonstrate “external mechanical integrity.” If no adequate cementing records exist, these regulations at 40 C.F.R. §146.8(c)(1) require a temperature or noise log to make such demonstration of “external mechanical integrity.”
35. The cement bond log failed to conclusively demonstrate that injected fluids are contained within the injection zone, since it showed less than 80% bond rating across the confining zone (4798 to 5908 feet below surface), and thus failed to demonstrate “external mechanical integrity.” In order to demonstrate adequate confinement, EPA required a temperature log, noise log, oxygen activation log or radioactive tracer survey to be

conducted by September 21, 2001. This fact was communicated to Respondent by letter dated August 2, 2001.

36. On September 8, 2001, Respondent elected to conduct a temperature log in order to demonstrate adequate confinement of the injected fluids (i.e. to demonstrate “external mechanical integrity”).
37. In a September 21, 2001, letter sent to Respondent, EPA communicated that it had analyzed the temperature log, found it failed to conclusively demonstrate “external mechanical integrity” and set forth additional requirements to continue to conduct temperature logs (1) after one year of injection passes, (2) following any well treatment to stimulate perforations, or (3) if the well’s injectivity increases by more than 10% over the course of a year.
38. Respondent began injection into the Subject Well in August 2001.
39. To remain in compliance with the requirements to demonstrate “external mechanical integrity” as set forth in EPA’s September 21, 2001, letter, Respondent was required to conduct a temperature log after one year of injection had passed, by August 2002.
40. To date, EPA has no information that there have been additional temperature or other logs conducted in the Subject Well.
41. During the times displayed in Attachment A, Respondent failed to comply with the requirement to demonstrate “external mechanical integrity,” and therefore violated the Act.

***F. Operation Without Mechanical Integrity***

42. The UIC regulations at 40 C.F.R. §144.52(a)(8) and the UIC Permit at part II(C)(2)(d) prohibit injection into the well if it lacks mechanical integrity.
43. During an inspection conducted by EPA representatives on September 15, 2004, the annulus was monitored and, as a result, the well was observed to have 1300 psi pressure on the annulus, while the well's injection tubing was observed to have 1325 psi pressure. A well with mechanical integrity, as defined at 40 C.F.R. § 146.8(a)(1), would normally have zero pressure on the annulus (or close to zero pressure) regardless of the injection tubing pressure. The similarity between the annulus pressure observed and the injection pressure observed indicates the well lacked mechanical integrity at that time.
44. During the September 15, 2004, inspection, the well was observed to be actively injecting.
45. During the times displayed in Attachment A, Respondent failed to comply with the requirement prohibiting injection into the well if it lacks mechanical integrity, and therefore violated the Act.

**PROPOSED ORDER WITH ADMINISTRATIVE CIVIL PENALTY**

46. Pursuant to section 1423(a) of the Act, 42 U.S.C. § 300h-2, and based on the foregoing findings, after taking into account: (1) Respondent's alleged violations are serious and a threat to human health and the environment; (2) Respondent gained an economic advantage over its competition by virtue of its late fluid analysis violations, failure to

properly maintain the wellhead and failure to maintain compliance with the maximum allowable injection pressure and prohibition against injection without mechanical integrity and thereby failed to alternatively dispose of a portion of its salt water; (3) EPA is unaware that Respondent has a history of violations such as these alleged in the complaint; (4) EPA is unaware of good faith efforts by Respondent to comply with applicable UIC regulations; (5) EPA has no basis to believe that the proposed penalty is one which would have a severe economic impact on Respondent; and (6) such other matters as justice may require, **EPA HEREBY ORDERS:**

47. Respondent shall pay an administrative civil penalty (the "Penalty") in the amount of seventy thousand five hundred seventy-four dollars (\$70,574) for the violations of the UIC Program regulations described above. Payment must be made by money order or certified check made payable to "Treasurer, United States of America" and mailed within thirty (30) days of Respondent's receipt of this Order to the following address:

EPA - Region 8  
Regional Hearing Clerk  
P.O. Box 360859  
Pittsburgh, Pennsylvania 15251.

A copy of said check shall be mailed to the following address:

Jim Eppers (8ENF-L)  
Enforcement Attorney  
U.S. EPA - Region 8  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466.

48. Respondent shall, no later than 30 calendar days after the date of receipt of this Order, develop testing plans to ensure that its prior injection pressure exceedences did not cause fluid movement out of the designated injection zone. Such plans must include radioactive tracer surveys, temperature logs, and/or noise logs, and must be approved in advance of its implementation by EPA. The plans must include an interpretation by a knowledgeable analyst.
49. Respondent shall, no later than 30 calendar days after the date of receipt of this Order, develop compliance procedures to ensure its UIC Class II injection well remains in compliance with all applicable regulatory and permit requirements, and submit said compliance procedures to EPA in accordance with paragraph 50. The procedures must include, at a minimum, communication among different levels of Respondent's employees and contractors, communication with EPA, posting signs at wellheads as a reminder of operating requirements, and a methodology for ensuring timely and complete reporting, routine and otherwise. These plans must be submitted to EPA in advance of their implementation. Approval of these plans in no way stays the responsibility of Respondent to comply with all requirements in the UIC permit, any applicable UIC regulations, and the Act.
50. Please submit all reports and compliance procedures to:

Nathan Wiser (MC 8ENF-UFO)  
U.S. EPA Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, CO 80202-2466.

**NOTICE OF OPPORTUNITY TO REQUEST A HEARING**

51. Under section 1423(c)(3)(A) of the Act, 42 U.S.C. § 300h-2(c)(3)(A), Respondent may request, within 30 calendar days of receiving this Order, a hearing on this matter. Such request (also referred to as “Answer” and defined in 40 C.F.R. §22.15) must be made in writing and must specify the factual and legal issues in dispute and the specific factual and legal grounds for Respondent's defense(s). At the hearing, Respondent may contest any material fact set forth herein and the propriety of the proposed penalty and/or compliance requirement described above. The procedures for a hearing, if one is requested, are set out in 40 C.F.R. part 22, Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination, or Suspension of Permits, Rule dated July 23, 1999 64 Federal Register 141, a copy of which is enclosed with this Order. If Respondent does not request a hearing, EPA may finalize this Order, thereby requiring compliance and assessing the full penalty proposed above.

52. Respondent must send any request for a hearing to:

Tina Artemis  
Regional Hearing Clerk  
U.S. EPA Region 8, 8RC  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466.

53. Respondent may confer informally with EPA concerning the alleged violation or the amount of the proposed penalty regardless of whether Respondent requests a hearing.

Respondent may be represented by counsel at the informal conference. If a settlement is

reached, it will be formalized in a document entitled Consent Agreement and finalized by the issuance of a Final Order by the Regional Judicial Officer. If Respondent wishes to confer informally with EPA, please contact Jim Eppers, Enforcement Attorney, at (303) 312-6893.

- 54. Respondent is advised that EPA is required to notify the public about this action, and that members of the public have a right under section 1423(c)(3)(B) of the Act, 42 U.S.C. § 300h-2(c)(3)(B), to comment on this matter. Those members of the public who comment will also have the right to present evidence and be heard at any hearing on this matter.
- 55. EPA will review any comments submitted on the Order and will thereafter determine whether to modify or withdraw the Order or whether to adjust the proposed penalty.

#### **GENERAL PROVISIONS**

- 56. This Order does not constitute a waiver, suspension, or modification of the requirements of EPA UIC permit WY20831-04394, or 40 C.F.R. parts 144, 146, 147, or any other applicable provision of the Act or the UIC regulations implementing the Act, which remain in full force and effect. Issuance of this Order is not an election by the EPA to forego any civil or any criminal action otherwise authorized under the Act.
- 57. The provisions of this Order shall apply to and be binding upon Respondent and its respective officers, directors, agents, successors or assigns.
- 58. Violation of the terms of this Order may subject Respondent to further enforcement action pursuant to section 1423(b) of the Act.

Issued this 28<sup>TH</sup> day of September, 2004.

UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY, REGION 8  
Complainant.

Michael T. Risner for/  
Carol Rushin  
Assistant Regional Administrator  
Office of Enforcement, Compliance  
and Environmental Justice



**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that the original and one copy of the attached PROPOSED ADMINISTRATIVE ORDER AND OPPORTUNITY TO REQUEST A HEARING (COMPLAINT) were hand-carried to the Regional Hearing Clerk, EPA Region 8, 999 18<sup>th</sup> Street, Denver, Colorado, and that a true copy of same was sent via Certified Mail, Return Receipt Requested, to:

Tom Brown, Inc.  
c/o C T Corporation System  
1720 Carey Avenue  
Cheyenne, Wyoming 82001

**9/28/04**

Date

**SIGNED**

Judith McTernan

Operator Name	Type of Violation	Date Violation Began	Date Violation Ended	Violation duration in days	Violation duration in months	f
Tom Brown, Inc.	A. Excess Injection Pressure	03/01/2002	06/30/2002	121	4	
Tom Brown, Inc.	A. Excess Injection Pressure	08/01/2002	09/30/2002	60	2	
Tom Brown, Inc.	A. Excess Injection Pressure	12/01/2002	12/31/2002	30	1	
Tom Brown, Inc.	A. Excess Injection Pressure	01/01/2003	01/31/2003	30	1	
Tom Brown, Inc.	B. No list of fluid sources	02/15/2002	09/30/2004	958	32	
Tom Brown, Inc.	C. No fluid analysis	02/15/2002	06/05/2003	475	16	
Tom Brown, Inc.	D. Faulty gauge	11/20/2003	12/11/2003	21	1	
Tom Brown, Inc.	E. Failure to conduct temp log	08/31/2002	09/30/2004	761	25	
Tom Brown, Inc.	F. Operation without mechanical integrity	09/15/2004	09/16/2004	1	0	

**IF YOU WOULD LIKE COPIES OF THE OTHER ATTACHMENTS, PLEASE CONTACT THE REGIONAL HEARING CLERK.**

**THIS DOCUMENT WAS FILED IN THE RHC'S OFFICE ON SEPTEMBER 28, 2004.**